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(54) Receptacle tampering sensor and indicator and method therefor.

associated with a receptacle (1) filled with dosage forms (e.g. chemically treated strip, whereby to cause the strip to over-the-counter drugs) and a corresponding method by assume a characteristic color that is indicative of a possible which to quickly and easily warn a consumer that an tampering condition. unauthorized tampering may have occurred to the receptacle and the contents (2) thereof. The tampering indicator is preferably either attached to or integrally formed with a seal (36) at the underside of a removable receptacle cap (8). The tampering indicator comprises a fluid filled reservoir (14), a tab (10) having a chemically treated indicator strip (22) thereat, and a fluid path (18, 24) by which fluid from the reservoir communicates with the indicator strip. The indicator is engaged by the rim (40) of the receptacle when the cap is positioned thereover by the dosage form manufacturer. Accordingly, fluid is forced from the reservoir into the fluid path. However, the fluid path is initially blocked at the engagement thereof by the receptacle rim. The tab and the indicator strip thereof extend outwardly from beneath the cap of the receptacle for providing the consumer with a visual indication in the event of an unauthorized removal of the cap from the receptacle. That is, should the cap be removed from the receptacle and the fluid path be moved out of engagement with the receptacle rim prior to a purchase by a consumer, whereupon tampering with the contents of the receptacle might occur, fluid from the supply

(57) A reliable and low cost sensor and indicator (12) to be thereof is permitted to flow via the fluid path to the

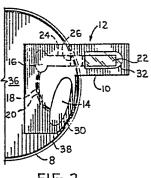


FIG. 2



EUROPEAN SEARCH REPORT

EP 82 11 0666

	DOCUMENTS CONSID				CLASSIFICATION OF THE
ategory	Citation of document with in of relevant	ndication, where approp t passages		Relevant to claim	APPLICATION (Int. Cl. 3)
A	FR-A-2 252 619 (SCIENCES) * Page 3, line 25; figures 1,2 *			1	B 65 D 55/02
A	FR-A-2 361 074 (ROSEL) * Whole document *			1	
A	US-A-2 143 508	- (COLLENS)			
A	AT-B- 307 976	- (LUX)			
D,A	FR-A-2 243 887 MINING) & US - A - 3 923				TECHNICAL FIELDS SEARCHED (Int. Cl. 3) B 65 D
D,A	US-A-3 896 965	(CORNELL)			
D,A	FR-A-2 247 396		TD.)		
		- - -			
	The present search report has b	een drawn up for all cla	ims		
Place of search THE HAGUE Date of completion of the search 18-03-1985		-1985	MART	,	
7 A : 1	CATEGORY OF CITED DOCU particularly relevant if taken alone particularly relevant if combined we document of the same category technological background non-written disclosure intermediate document		D: document c	ig date ited in the a ited for oth	erlying the invention It, but published on, or application er reasons atent family, corresponding